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Leucochloridium vogtianum Baudon, 1881 (Trematoda) new for the Hungarian fauna

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ABSTRACT: Sporocysts of Leucochloridium vogtianum Baudon, 1881 (Trematoda) found in the intermediate host Succinea elegans Risso, 1826, new for the Hungarian fauna.

Leucochloridium vogtianum Baudon is one of the most rarely reported trematodes. It is known from few localities only. The sporocyst of L. vogtianum was first described by BAUDON in 1881 in France from snail Catinella arenaria (Bouchard-Chantereaux). Later on GINECINSKAIA (1954) found sporocyst of this species in seven specimens of Succinea elegans in the Volga delta and described them as an unknown wart-like sporocyst. POJMAŃSKA (1962, 1978) recorded this species et Białowieza, in the lakes Arklity and Strȩgiel in the Mazurian Lakeland as well as in the Lake Gopło. Sporocysts occurred in S. putris Linnaeus, 1758 and S. elegans Risso, 1826 (a mandatory name for the latter is S. elegans Risso and not S. pfeifferi Rossmässler as erroneously cited by POJMAŃSKA, 1978). As many as 13 sporocysts were collected by RIETSCHEL (1972) in Hesse; the only host infected was S. elegans.

The fall of 1978 brought a new finding of a sporocyst of L. vogtianum in one of ten specimens of S. elegans collected by the present author on the shores of Lake Balaton (County Veszprém, Balatonkenese).

In the sporocyst one sac was mature, two more were juveniles and several were very small (Fig. 1). GINECINSKAIA (1965) reported that her sporocysts were weakly branched, with one or two pigmented sacs. A small number of mature sacs was also observed by POJMAŃSKA (1962).

The mature sac found by the author is big and cylindrical. Its length is 14 mm (BAUDON reported 13 mm, POJMAŃSKA 20 mm, RIETSCHEL 18 mm), while its width is 2 mm (RIETSCHEL reported 3.5 mm). According to the latter author the shorter sacs are often thicker. The distal sac section resembles a sharply pointed cupola; it is smooth, without mamillae. Its whitish top is covered with regular, dark brown spots, a bright brown band running below it. Behind the band in the fair background thinner or larger bright brown strips arranged in six longitudinal rows appear. The distal section of the sac is separated from the proximal one by a deep constriction. The latter is whitish in colouration and is covered with many mamillae and digitiform processes. On the top of each mamilla several bright brown spots are present. Such spots may also occur on the basis of mamilla and the sac wall.

In its shape and pigmentation this sac corresponds exactly to the sporocyst sacs of L. vogtianum Baudon, 1881 and those described by other authors (POJMAŃSKA, 1962, 1978; RIETSCHEL, 1972).

A large number of metacercariae is contained in the sac. According to GINECINSKAIA (1954) up to 120. Some matacercariae were big (above 1 mm), others quite small (around 0.5 mm). Every metacercaria was enveloped by a transparent tunica. Such envelops were observed by WIKTOROWA (1975) in metacercariae of Leucochloridium fuscum Rietschel, 1972.

The sac of the sporocyst of L. vogtianum, as reported by RIETSCHEL (1972), rarely penetrates a snail tentacle. As a consequence, it is difficult to distinguish between an infected and a

healthy individual. Nevertheless, as a rule the sacs leave the snail body. Shortly before it happens movements of the sac become intensive, while following liberation the sac remains motionless.

The developmental cycle of L. vogtianum has not been known so far. Recently studies carried out by POJMAŃSKA (1978) has revealed that the mature form of this trematode is a bird parasite within the genera Acrocephalus and Panurus.

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Fig. 1. Sporocyst of Leucocloridium vogtianum Baudon (Photo: M. JACKIEWICZ)